

IN THE CLAIMS

Cancel Claims 1, 18, and 19 without prejudice and without disclaimer of subject matter.

Please amend Claims 2-5, 7-9, 11, 13, 20-22, 25, 27, 29, 34, 40, and 47 as shown below.

1. (Canceled)

2. (Currently Amended) A method for producing an electron-emitting device devices, each including a pair of electrodes and an electroconductive film having an electron-emitting region, said electroconductive film being disposed between the pair of electrodes, wherein said the electron-emitting region is regions of the electron-emitting devices are formed by a process including the steps of:

preparing an electroconductive film films; and
energizing said electroconductive film films, while heating a substrate on which said electroconductive film is films are disposed at a temperature not higher than 150°C within an atmosphere comprising a gas for promoting cohesion of the electroconductive film films.

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3. (Currently Amended) The method according to Claim 1 or 2, wherein the gas for promoting the cohesion of the electroconductive film films is a reducing gas.

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4. (Currently Amended) The method according to Claim 1 or 2, wherein the gas for promoting cohesion of the electroconductive film films is H₂, CO or CH₄.

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5. (Currently Amended) The method according to Claim 1 or 2, wherein the gas for promoting the cohesion of the electroconductive film films is H₂.

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7. (Currently Amended) The method according to Claim 1 or 2, wherein the heating of the substrate is carried out at a temperature not higher than 100 °C.

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8. (Currently Amended) The method according to Claim 1 or 2, wherein the heating of the substrate is carried out at a temperature in the range of 50 °C to 100°C.

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9. (Currently Amended) The method according to Claim 1 or 2, wherein said each electroconductive film is an electroconductive film formed through a step of dispensing a droplet containing a metallic compound onto a substrate.

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10. (Original) The method according to Claim 9, wherein the dispensing of the droplet onto the substrate is carried out by an ink jet method.

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11. (Currently Amended) The method according to Claim 1 or 2, wherein a material to be subjected to the heating and the energizing so as to be formulated into said electroconductive film films comprises a metallic oxide.

12. (Original) The method according to Claim 11, wherein said metallic oxide is palladium oxide.

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13. (Currently Amended) The method according to Claim 1 or 2, wherein
said each electron-emitting device is a surface conduction electron-emitting device.

14. (Previously Amended) A method for producing an electron source comprising a plurality of electron-emitting devices, each including a pair of electrodes and an electroconductive film having an electron-emitting region, said electroconductive film being disposed between the pair of electrodes, comprising the steps of:

forming said plurality of electron-emitting devices by a process including the steps of:

heating, at a temperature not higher than 150°C, a substrate on which a plurality of electroconductive films are disposed; and

energizing said electroconductive films,

wherein said steps of heating and energizing are conducted within an atmosphere comprising a gas for promoting cohesion of the electroconductive film.

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15. (Currently Amended) A method for producing an image-forming apparatus comprising (a) an electron source comprising a plurality of electron-emitting device devices, each including a pair of electrodes and an electroconductive film having an electron-emitting region, said electroconductive film being disposed between the pair of

electrodes, and (b) an image-forming member for forming an image under irradiation of electrons emitted from the electron source, the method comprising the steps of:

forming said plurality of electron-emitting devices by a process including the

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steps of:

heating, at a temperature of not higher than 150°C, a substrate on which a plurality of electroconductive films are disposed; and energizing said electroconductive films, wherein the steps of heating and energizing are conducted within an atmosphere comprising a gas for promoting cohesion of the electroconductive films.

16. (Previously Amended) A method for producing an electron source comprising a plurality of electron-emitting devices, each including a pair of electrodes and an electroconductive film having an electron-emitting region, said electroconductive film being disposed between the pair of electrodes, comprising the steps of:

forming said plurality of electron-emitting devices by a process including the steps of:

preparing a plurality of electroconductive films; and energizing said electroconductive films, while heating a substrate on which said electroconductive films are disposed at a temperature of not higher than 150°C within an atmosphere comprising a gas for promoting cohesion of the electroconductive film.

17. (Previously Amended) A method for producing an image-forming apparatus comprising (a) an electron source comprising a plurality of electron-emitting devices, each including a pair of electrodes and an electroconductive film having an electron-emitting region, said electroconductive film being disposed between the pair of electrodes, and (b) an image-forming member for forming an image under irradiation of electrons emitted from the electron source, the method comprising the steps of:

forming said plurality of electron-emitting devices by a process including the steps of:

preparing a plurality of electroconductive films; and
energizing said electroconductive films, while heating a substrate on which said electroconductive films are disposed at a temperature of not higher than 150°C within an atmosphere comprising a gas for promoting cohesion of the electroconductive film.

18. (Canceled)

19. (Canceled)

20. (Currently Amended) The method according to any one of Claims 14 to ~~19~~ 17, wherein the gas for promoting the cohesion of the electroconductive film is a reducing gas.

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21. (Currently Amended) The method according to any one of Claims 14 to ~~19~~ 17, wherein the gas for promoting the cohesion of the electroconductive film is H₂, CO, or CH₄.

22. (Currently Amended) The method according to any one of Claims 14 to ~~19~~ 17, wherein the gas for promoting the cohesion of the electroconductive film is H₂.

23. (Previously Amended) The method according to any one of Claims 14 to 17, wherein the heating of the substrate is carried out at a temperature of not more than approximately 100°C.

24. (Previously Amended) The method according to any one of Claims 14 to 17, wherein the heating of the substrate is carried out at a temperature in the range of 50°C to 100°C.

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25. (Currently Amended) The method according to any one of Claims 14 to ~~19~~ 17, further comprising the step of forming the electroconductive film by dispensing a droplet containing a metallic compound onto the substrate.

26. (Previously Added) The method according to Claim 25, wherein the dispensing of the droplet onto the substrate is carried out by an ink jet method.

27. (Currently Amended) The method according to any one of Claims

68 14 to ~~19~~ 17, wherein a material to be subjected to the heating and the energizing so as to be formulated into said electroconductive film comprises a metallic oxide.

28. (Previously Added) The method according to Claim 27, wherein the

metallic oxide is palladium oxide.

29. (Currently Amended) The method according to any one of Claims

69 14 to ~~19~~ 17, wherein the electron-emitting device is a surface conduction electron-emitting device.

30. (Previously Amended) A method for producing an electron source comprising a plurality of electron-emitting devices, each including a pair of electrodes and an electroconductive film having an electron-emitting region, said electroconductive film being disposed between the pair of electrodes, comprising the steps of:

forming said plurality of electron-emitting devices by a process including the steps of:

preparing a plurality of electroconductive films; and

energizing said electroconductive films, while heating a substrate on which said electroconductive films are disposed within a predetermined atmosphere comprising a gas for promoting cohesion of the electroconductive films, wherein after the

start of the energizing and the heating, the predetermined atmosphere including the gas for promoting the cohesion of the electroconductive films is formed.

31. (Previously Amended) A method for producing an image-forming apparatus comprising (a) an electron source comprising a plurality of electron-emitting devices, each including a pair of electrodes and an electroconductive film having an electron-emitting region, said electroconductive film being disposed between the pair of electrodes, and (b) an image-forming member for forming an image under irradiation of electrons emitted from the electron source, the method comprising the steps of:

forming said plurality of electron-emitting devices by a process including the steps of:

preparing a plurality of electroconductive films; and
energizing said electroconductive films, while heating a substrate on which said electroconductive films are disposed within a predetermined atmosphere comprising a gas for promoting cohesion of the electroconductive films, wherein, after the start of the energizing and the heating, the predetermined atmosphere including the gas for promoting the cohesion of the electroconductive films is formed.

32. (Previously Amended) The method according to Claim 30, wherein after the start of heating, the energizing starts.

33. (Previously Amended) The method according to Claim 31, wherein
after the start of the heating, the energizing starts.

34. (Currently Amended) The method according to any one of Claims
18, 19, and 30-33, wherein the heating of said substrate is conducted at a temperature of
not higher than 150°C.

36. (Previously Amended) The method according to any one of Claims 30-
33, wherein the gas for promoting the cohesion of the electroconductive film is a reducing
gas.

37. (Previously Amended) The method according to any one of Claims 30-
33, wherein the gas for promoting cohesion of the electroconductive film is H₂, CO or CH₄.

38. (Previously Amended) The method according to any one of Claims 30-
33, wherein the gas for promoting the cohesion of the electroconductive film is H₂.

40. (Currently Amended) The method according to any one of Claims 18,
19 and 30-33, wherein the heating of the substrate is carried out at a temperature not more
than 100 °C.

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41. (Currently Amended) The method according to any one of Claims 18,
19 and 30-33, wherein the heating of said substrate is carried out at a temperature in the
range of 50 °C to 100°C.

42. (Previously Amended) The method according to any one of Claims 30-
33, wherein said electroconductive film is an electroconductive film formed through a step
of dispensing a droplet containing a metallic compound onto a substrate.

43. (Previously Added) The method according to Claim 42, wherein the
dispensing of the droplet onto the substrate is carried out by an ink jet method.

44. (Previously Amended) The method according to any one of Claims 30-
33, wherein said electroconductive film is an electroconductive film comprising a metallic
oxide as a matrix.

45. (Previously Added) The method according to Claim 44, wherein said
metallic oxide is palladium oxide.

46. (Previously Amended) The method according to any one of Claims 30-
33, wherein said electron-emitting device is a surface conduction electron-emitting device.

47. (Currently Amended) A method according to ~~any one of Claims 18, 30,~~

G 12 and Claim 30 or 31, wherein the heating is conducted at a temperature of not higher than 150°C.